Abstract

A sample-to-pixel calculation unit in a graphics system may comprise an adder tree. The adder tree includes a plurality of adder cells coupled in a tree configuration. Input values are presented to a first layer of adder cells. Each input value may have two associated control signals: a data valid signal and a winner-take all signal. The final output of the adder tree equals (a) a sum of those input values whose data valid signals are asserted provided that none of the winner-take all signals are asserted, or (b) a selected one of the input values if one of the winner-take-all bits is asserted. The selected input value is the one whose winner-take-all bit is set. The adder tree may be used to perform sums of weighted sample attributes and/or sums of coefficients values as part of pixel value computations.

P4835.000